28 June 1984

MEMORANDUM FOR: $C S D / O C$

SUBJECT   : Revisions/Expansion of the Interface Control Document
                    for PRIM Release 2

The following areas have been revised or deleted from the ICD:

Change front page to reflect new ODP organization
1.1 Remove reference to Release 2
1.4 Change reference to Office of Personnel
    Configuration Control Board to Configuration
    Control Board and reflect new organizations.
Chapter 3 DATA INTERFACE - HRS2 to PRIM remove
    reference to Release 2
3.1.1 2nd para, 2nd sentence add 'be used to'
      3rd para, add reference to PRCHGLOAD, PRIM
      PERSIGN and PRIMSEP
      3rd para, add the sentence ' The 'ZZ' action
      will be ....'
      3rd para, delete the sentence 'In addition, the
      HRS2.........'
3.1.3 Change reference to validation dictionaries being
      moved nightly to weekly
3.2   Release 2 remove completely
3.3   Release 3 remove 'in 1983'
3.4   Release 5 change reference to CAPER to IAPS
3.4.1 Change reference to CAPER to IAPS.

                                        PRIM TEAM

U N C L A S S I F I E D

Personnel Resource Information Management

(PRIM)

Interface Control Document
(ICD-C20-1C)

by

PRIM Project Team

ODP/MISG/ISD
OP/ID/ADRB

28 June 1984

U N C L A S S I F I E D

CONTENTS

LIST OF TABLES

Chapter 1

INTRODUCTION

1.1   PURPOSE

The purpose of this Interface Control Document (ICD) is to define the
interface between the Human Resources System (HRS2 Data Base) and the
Personnel Resource Information Management (PRIM) System. This docu-
ment will describe all data received from the HRS System, as well as
hardware interfaces, and communication facilities required to move
this data. Due to the complexity of the PRIM System, it is being de-
signed in a phased approach, consisting of five releases. The ICD
will address only Releases 1, 3, and 5; these are the only Releases
that consist of data received from an external system.

1.2   SCOPE

During the Definition Phase this document outlines the requirement,
purpose, schedule and method of data transfer between HRS2 and PRIM.
Details of data transfer interfaces and verification testing will also
be discussed. During the Preliminary System Design Phase this docu-
ment will be expanded to include the data descriptions and data char-
acteristics of the data exchanged. During the Detailed System Design
Phase this document will be expanded to include the data contents,
data rules, and data organization of the data exchanged.

     This ICD consists of five chapters:

        Chapter 1 - 'Introduction' presents the purpose and scope of
the PRIM Interface Control Document and all references applicable to
the contents of the Interface Control Document. The Document Control
section identifies the organizations responsible for publication and
maintenance of the document.

        Chapter 2 - 'Data Interfaces - PRIM to HRS2' is not applicable
at this time.

        Chapter 3 - 'Data Interface - HRS2 to PRIM' presents the Re-
quirement for the data interface, the Purpose for the data interface,
and the Schedule and Method of Transfer of the data.

        Chapter 4 - 'Data Transfer Interfaces' states the mode of data
transfer and defines the backup and recovery procedures.

Chapter 5 - 'Verification' defines the Unit testing and Interface testing and the Organization/Systems responsible for performing this testing.

1.3 REFERENCES

The PRIM Project Team is utilizing a number of documents, publications and other reference material listed in Table 1 below.

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                            TABLE 1

         Documents, Publications and Reference Material


      1.  ODP Applications Documentation Standards

      2.  PRIM System Development Plan

      3.  PRIM Detailed System Requirements Document

      4.  PRIM Data Requirements Document

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1.4 DOCUMENT CONTROL

During the development of the PRIM System all changes to the baselined Interface Control Document (ICD), will be submitted to the Configuration Control Board for PRIM. Changes approved by the CCB will be incorporated into the ICD by the Development Branch (DB) in the Information Systems Division (ISD) of MISG.

During operational phases of PRIM changes to this document will be controlled by the Configuration Control Board in the Information Support Branch in the Information Systems Division (ISD) of MISG.

Chapter 2

DATA INTERFACE - PRIM TO HRS2 (DEVELOPMENT SYSTEM TO EXTERNAL SYSTEM)

At the present time there are no plans to transfer data from PRIM to the HRS2 Data Base.

Chapter 3

DATA INTERFACE - HRS2 TO PRIM (EXTERNAL SYSTEM TO DEVELOPMENT SYSTEM)

Chapter 3 presents the requirement, purpose, and schedule and method
of transfer of data from the HRS2 Data Base to the PRIM Data Base.
Due to the complexity of the PRIM System, it is being designed in a
phased approach, consisting of five releases. Chapter 3 will address
only Releases 1, 3, and 5; these are the only Releases that consist of
data received from an external system.

3.1   RELEASE 1

Release 1 of the PRIM System requires the following data lists be
transferred from the HRS2 Data Base to PRIM: NAME, PERSIGN, INTERFACE,
QUAL(Active), HPOSNR, LREQID, ORGCODE, POSNR, STRENGTH, and supporting
COMVAD validation dictionaries. A new data list (PRIFN) will be es-
tablished on HRS2 and PRIM to guarantee that dumps and loads are per-
formed in the same sequential order. In order to keep PRIM's control-
led component access accurate and to keep components apprised of
selected changes, the HRS2 INTERFACE Data List must be extracted and
loaded to PRIM.

3.1.1   PURPOSE

The purpose of Release 1 of the HRS2/PRIM Interface is to provide the
most frequently requested official personnel data resident on the HRS2
Data Base. This interface will also include supporting files. After
data is moved from HRS2 to PRIM, components will have the capability
to query official data as well as produce online and offline reports.

An interface is required with the HRS2 Data Base to acquire data
from HRS2's INTERFACE Data List. The INTERFACE Data List contains
data which will be used to update the PRIM security matrix used by
components to retrieve data from the PRIM Data Base.

An extract will be used to pull the necessary data from the HRS2
INTERFACE Data List resident on the HRS2 Data Base. The PRCHGLOAD
procedure will then scan the INTERFACE data for SSN changes, 'ZZ'
'RE', and 'SD' actions or any action changing Service Designation or
ORGCODE and make the necessary updates to PRIM PERSIGN or PRIMSEP.
The 'ZZ' action will be identified by the procedure, but handled manu-
ally by the PRIM Data Base Manager. The INTERFACE data will then be
added to a PRIM INTERFACE file for retrieval by components.

3.1.2 SCHEDULE AND METHOD OF TRANSFER

A total of ten (10) HRS2 data lists as well as supporting validation
dictionaries will be transferred to PRIM in Release 1 to establish the
PRIM Data Base. Thereafter these selected files and selected data
from the HRS2 INTERFACE Data List will be transferred to PRIM after
the nightly update of the HRS2 Data Base. The DDUMP/LOGICAL and
RESTORE/LOGICAL software facilities are currently planned for this
transfer. The HRS2 INTERFACE Data List will be extracted and loaded
into PRIM via a GIMS procedure.

3.1.3 DATA

| Release 1 of the PRIM System will require the following data lists to
| be moved nightly from the HRS2 Data Base. The validation dictionaries
| will be moved weekly. See Chapter 3, Data Specification Document and
below for further descriptions.

PERSIGN	A/N	Data File
QUAL(Active)	A/N	Data File
HPOSNR	A/N	Data File
LREQID	A/N	Data File
NAME	A/N	Data File
ORGCODE	A/N	Data File
POSNR	A/N	Data File
STRENGTH	A/N	Data File
INTERFACE	A/N	Data File
PRIFN	A	Data File
COMVAD	A/N	Edit & Validation Dictionaries

3.1.4 DATA CHARACTERISTICS

PERSIGN

Data Name	- Personnel Assignment and Status Data
System Generated By	- HRS2
System Used By	- PRIM
Contents	- Current Personnel Assignment and Status.
Number of Times Generated	- Nightly
Data Organization	- Sequential
Logical Record Format	- Fixed Block
Logical Record Size	- 409

QUAL(Active)

Data Name	- Central Qualification System
System Generated By	- HRS2
System Used By	- PRIM
Contents	- Active Central Qualification

                                    Data on active and some
                                    former Agency personnel.
       Number of Times Generated - Nightly
       Data Organization   - Sequential
       Logical Record Format   - Fixed Block
       Logical Record Size   - 287

HPOSNR

       Data Name   - Position History
       System Generated By   - HRS2
       System Used By   - PRIM
       Contents   - All deleted Position Records
                                    in the Agency since August 1974.
       Number of Times Generated - Nightly
       Data Organization   - Sequential
       Logical Record Format   - Fixed Block
       Logical Record Size   - 105

LREQID

       Data Name   - Language Requirements
       System Generated By   - HRS2
       System Used By   - PRIM
       Contents   - All valid Organization Units
                                    with Language Requirements in
                                    the Agency.
       Number of Times Generated - Nightly
       Data Organization   - Sequential
       Logical Record Format   - Fixed Block
       Logical Record Size   - 77

NAME

       Data Name   - Name
       System Generated By   - HRS2
       System Used By   - PRIM
       Contents   - A cross-reference from the
                                    last and first name to the
                                    Individual's Identifying
                                    number.
       Number of Times Generated - Nightly
       Data Organization   - Sequential
       Logical Record Format   - Fixed Block
       Logical Record Size   - 70

ORGCODE

       Data Name   - Organizations
       System Generated By   - HRS2
       System Used By   - PRIM
       Contents   - All valid and current organiza-
                                    tion codes within the hierarchial
                                    structures of the Agency.

```
            Number of Times Generated - Nightly
            Data Organization         - Sequential
            Logical Record Format     - Fixed Block
            Logical Record Size       - 87
```

POSNR

```
            Data Name                 - Position Number
            System Generated By       - HRS2
            System Used By            - PRIM
            Contents                  - All valid and current
                                        positions in the Agency.
            Number of Times Generated - Nightly
            Data Organization         - Sequential
            Logical Record Format     - Fixed Block
            Logical Record Size       - 212
```

STRENGTH

```
            Data Name                 - Personnel Strength Matrix
            System Generated By       - HRS2
            System Used By            - PRIM
            Contents                  - All active employees are
                                        accounted for except second
                                        records which have a ceiling
                                        code of 'S'.
            Number of Times Generated - Nightly
            Data Organization         - Sequential
            Logical Record Format     - Fixed Block
            Logical Record Size       - 55
```

INTERFACE

```
            Data Name                 - Interface for PERSIGN Data
            System Generated By       - HRS2
            System Used By            - PRIM
            Contents                  - PERSIGN transactions for all
                                        Staff, Contract, FBIS,
                                        Consultants and Independent
                                        Contractor personnel.
            Number of Times Generated - Nightly
            Data Organization         - Sequential
            Logical Record Format     - Fixed Block
            Logical Record Size       - 576
```

PRIFN

```
            Data Name                 - PRIM Interface File Name
            System Generated By       - HRS2
            System Used By            - PRIM
            Contents                  - List of files to be included
                                        in the HRS2/PRIM Interface.
                                        List is in the order of the
```

```
                                    Dump and Load.
Number of Times Generated  - Nightly
Data Organization            - Sequential
Logical Record Format        - Fixed Block
Logical Record Size          - 12
```

COMVAD

```
Data Name                  - Edit and Validation Data
System Generated By        - HRS2
System Used By             - PRIM
Contents                   - All data used for Edit checks
                             and Validation of Data.
Number of Times Generated  - Weekly
Data Organization          - Sequential
Logical Record Format      - Fixed Block
Logical Record Size        - 385 (TBR)
```

3.2   THIS SECTION DELETED

3.3   RELEASE 3

Release 3 involves the transfer to PRIM of additional requested HRS2
data resident in the following HRS projects: CEMLOC, CIARDS, CTP,
PERFIT, PERSEAS, CENQUAL(QUACOM), TRAIN, and supporting COMVAD dic-
tionaries if not previously transferred. CEMLOC is scheduled to be
made part of the HRS2 Data Base. A requirement to move all TRAIN data
to an online data base (i.e. HRS2 or PRIM) is to be resolved.(TBR)

3.3.1   PURPOSE

The purpose of Release 3 is to provide the PRIM Data Base with the re-
maining HRS2 data requested for transfer by the components. This will
give components additional personnel and training information with
which to plan future personnel assignments.

3.3.2   SCHEDULE AND METHODS OF TRANSFER

A total of eleven (11) data files (CEMLOC, LOCLNAME, CRDMAST, CRHHIST,
CTP, FRCALLUP, FRHISTORY, OSINDEX, OSHIST, QUACOM, and TRAIN) and sup-
porting COMVAD dictionaries (if not previously transferred) will be
transferred from the HRS2 Data Base to PRIM in Release 3. The DDUMP
LOGICAL/RESTORE LOGICAL software facilities used in previous releases
will be expanded to include Release 3 data. At this point all HRS2

data lists and COMVAD dictionaries referred to in Releases 1 and 3
will be loaded to PRIM after the nightly update of the HRS2 Data Base.

3.4 RELEASE 5

A requirement exists for PRIM to provide the capability to monitor and
more effectively control and report on pre-employment processing from
| initial contact or resume to EOD. If the IAPS System is made a part
| of the HRS2 Data Base, IAPS data will be transferred to PRIM.

3.4.1 PURPOSE

| The purpose of Release 5 is to provide the PRIM Data Base with IAPS
| data. The components will use this data in recruitment planning, pro-
jecting and special purpose research projects.

3.4.2 SCHEDULE AND METHODS OF TRANSFER

A minimum of two (2) data files and an undetermined number of support-
ing translate dictionaries will be transferred from the HRS2 Data Base
to PRIM in Release 5. The number of supporting translate dictionaries
is to be resolved.(TBR) The DDUMP LOGICAL/RESTORE LOGICAL software fa-
cilities used in previous Releases will be expanded to include Release
5 data.

Chapter 4

DATA TRANSFER INTERFACES

It is currently planned to use DDUMP LOGICAL/RESTORE LOGICAL software
facilities to transfer data from the HRS2 System to the PRIM System.
Selected HRS2 files will be dumped to magnetic tape/disk pack and then
loaded to the PRIM Data Base. An alternative method would be used if
deemed more efficient.

   A daily data base statistical report is required for the PRIM
Data Base Manager. This report should be similar to the current GIMS
II Data Base Statistics Report for the HRS2 Data Base. The HRS2/PRIM
interface cannot be done until after the HRS2 nightly update has been
completed. After this update is completed, each data list loaded to
the PRIM System must be in sync with the corresponding data list in
the HRS2 Data Base. At the beginning of each business day, the PRIM
Data Base Manager will compare the HRS2 and the PRIM Daily Data Base
Statistical Reports to confirm that the two data bases are correct.

   In the event of failure in the HRS2/PRIM interface, the Data Base
Manager, in coordination with ODP, will determine which predefined ac-
tion should be initiated to correct the interface problem.

Chapter 5

VERIFICATION

5.1   UNIT TESTING

Unit testing is the responsibility of the PRIM development team. Major or necessary test results will be documented and retained as part of the PRIM project documentation.

Unit testing is defined to include:
1. Proving accuracy of computations.
2. Showing repeatability of results.
3. Testing all ranges of data values.
4. Thoroughly exercising every routine of every module and function within each program used in the interface.
5. Verify proper transmission of data between routines, modules, and programs.

PRIM will be developed and tested according to the following procedures:
1. ODP will use a development data base to test GIMS procedures, dictionaries, and menus.
2. Tested modules will be copied to the PRIM Development Data Base either by DBCC or Applications personnel for OP Acceptance Testing.
3. Once OP has completed their Acceptance Testing, the modules will be moved by DBCC to the PRIM Data Base where they will be available to the users in a production mode.

5.2   INTERFACE TESTING

Interface testing will be conducted between the HRS Data Base and the PRIM Development Data Base. These tests will verify the communication interface between the systems and the accuracy of the data transferred. Planning, coordinating, scheduling, and conducting these tests will be the responsibility of the PRIM project personnel supported by the customer as required.

It is important that a good communication link be established between the Data Base Managers and the Primary Applications Specialists (PAS) for the HRS2 Data Base and the PRIM Data Base. This link will guarantee that dictionary changes made to data lists in the HRS2 Data

Base and affected by the HRS2/PRIM interface are simultaneously
incorporated in the PRIM System.